

**WHAT IS CLAIMED IS:**

1. An encryption key setting system that sets an encryption key, which is used to encrypt radio communication data transmitted  
5 between an access point as a relay station for a wireless LAN and a terminal equipped with a device for connecting with the wireless LAN prior to the transmission, in said terminal, said encryption key setting system comprising:

10 a communication range restriction module that restricts a radio communication range between said access point and said terminal to be narrower than a general communication range; and

15 an encryption key setting module that, while the radio communication range is restricted by said communication range restriction module, transmits encryption key data representing the encryption key by wireless between said terminal and said access point located within the restricted radio communication range, so as to set the encryption key.

2. An encryption key setting system in accordance with claim  
20 2, said encryption key setting system further comprising:

an instruction module that gives an instruction to start setting of the encryption key; and

25 a condition specification module that specifies a condition of restricting the radio communication range to be narrower than the general communication range, based on the instruction given by said instruction module,

wherein said communication range restriction module restricts the radio communication range under the condition

specified by said condition specification module.

3. An encryption key setting system in accordance with claim 1, wherein said communication range restriction module is disposed 5 in said access point and carries out control to restrict the radio communication range to be narrower than the general communication range, when receiving an instruction of setting the encryption key from said terminal, and

10 said communication range restriction module, on conclusion of setting the encryption key by said encryption key setting module, carries out control to restore the restricted radio communication range to the general communication range.

15 4. An encryption key setting system in accordance with claim 1, wherein said communication range restriction module regulates a transmission output of said access point to restrict the radio communication range.

20 5. An encryption key setting system in accordance with claim 1, wherein said communication range restriction module comprises a shielding member to shield said terminal, in which the encryption key is set, and said access point from a radio signal.

25 6. An encryption key setting system in accordance with claim 1, wherein said access point comprises a registration module that registers unique information intrinsic to said terminal for communication.

7. An access point that is a relay station for a wireless LAN and establishes wireless communication with a terminal equipped with a device for connecting with the wireless LAN, said access point encrypting radio communication data as an object of communication with a preset encryption key, prior to wireless communication with said terminal, and transmitting the encrypted radio communication data to and from said terminal by wireless, said access point comprising:

10 a communication range restriction module that restricts a radio communication range between said access point and said terminal to be narrower than a general communication range; and

15 an encryption key setting module that, while the radio communication range is restricted by said communication range restriction module, transmits encryption key data representing the encryption key by wireless to and from said terminal located in the restricted radio communication range, so as to set the encryption key.

20 8. An encryption key setting method that sets an encryption key, which is used to encrypt radio communication data transmitted between an access point as a relay station for a wireless LAN and a terminal equipped with a device for connecting with the wireless LAN prior to the transmission, in said terminal, said encryption key setting method comprising the steps of:

25 (a) restricting a radio communication range between said access point and said terminal to be narrower than a general communication range; and

(b) while the radio communication range is restricted in said

step (a), transmitting encryption key data representing the encryption key by wireless between said terminal and said access point located within the restricted radio communication range, so as to set the encryption key.

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9. An authentication code setting system that sets an authentication code, which is required when a terminal equipped with a device for connecting with a wireless LAN establishes wireless communication with an access point as a relay station 10 for the wireless LAN to gain access to preset data on a network, in at least one of said terminal and said access point, said authentication code setting system comprising:

a communication range restriction module that restricts a radio communication range between said access point and said 15 terminal to be narrower than a general communication range; and

an authentication code setting module that, while the radio communication range is restricted by said communication range restriction module, transmits data representing the authentication code by wireless between said terminal and said 20 access point located within the restricted radio communication range, so as to set the authentication code.